

**Tentative Schedule for Course 5.8**  
**Water testing in the field using portable equipment**

**Day 1 – 8<sup>th</sup> September**

<b>Time</b>	<b>Activity</b>	<b>Presenter</b>
09:00 – 09:30	Introduction to course & Introduction of participants Field testing- importance for trustworthy results.	Professor Eqrar S. Stoveland
09:30 – 10:00	Why do we need to test the water. What information are we looking for? As Hydrogeologist? Water engineer? Environmental engineer. Which parameters?	Prof.Eqrar S.Stoveland
10:00-10:15	Tea break	
10:15-11:15	Significance of different water quality parameters., physical, chemical and biological parameters , pH, Alkalinity, EC, Salinity, Nitrate, Phosphate, Fluoride, chloride and others.	
11: 15 12:15	Sampling: procedures, representativeness, conservation, filtration, dilution, equipment, Training video/ Practical	
12:15- 13:30	Lunch	
13:30– 15:00	Presentation of main field kits in use in Water labs in Afghanistan. Practical's first session.	Fredric /Dr.Zabi

**Day 2– 9<sup>th</sup> September**

<b>Time</b>	<b>Activity</b>	<b>Presenter</b>
09:00 –10:30	Measurements for bacteriology, drinking water standards, main testing methods Demonstration of field kits / Practical.	FredricPatigny/ Dr.Zabi
10:30-10:45	Tea break	
10:45 – 12:30	Practical cont. Sampling, filtration and incubation,. Addn time may be required.	FredricPatigny/ Dr.Zabi
12:30-13:30	Lunch	
13:30-15:00	-Practical analysis of water qualities using field kots. NO <sub>3</sub> , PO <sub>4</sub> , F, Alkalinity, pH ( different methods) , Conductivity , Practical's session II	Dr.Svein /Eqrar

**Day 3 –10<sup>th</sup> September**

<b>Time</b>	<b>Activity</b>	<b>Presenter</b>
09:00 – 10:30	Basic chemistry needed for calculating results expressed as mole, ppm, meqv/l and pH calculations. Calculations: tutorials	Prof.Eqrar/ S. Stoveland
10:30-10:45	Tea break	
10:45-12:30	Tutorials, chemical calculations and conversions.	Prof Eqrar, Stoveland/ Abrar
12:30-13:30	Lunch	
13:30 – 15:00	Practical testing of samples, Practical's session III	Stoveland/ Prof.Eqrar Abrar , Jawed

**Day 4- 11<sup>th</sup> September**

<b>Time</b>	<b>Activity</b>	<b>Presenter</b>
09:00 –10:30	Calculation of results, NO expressed as NO <sub>3</sub> and as N, PO <sub>4</sub> expressed as PO <sub>4</sub> and as P, also m.eqv/l. Final results, probable precision of results?	Prof Eqrar/ Stoveland
10:30-10:45	Tea break	
10:45- 12:30	Reporting of results. Format, methods,	
12:30 – 13:30	Lunch	
13:30-15:30	Course evaluation, summary and Closing	Leadership of RuWatSIP/NORPLAN